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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,709	12/17/2003	Yong-Sung Ham	0630-1835P	5806

2292 7590 12/16/2008
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EXAMINER

CHACKO DAVIS, DABORAH

ART UNIT	PAPER NUMBER
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1795

NOTIFICATION DATE	DELIVERY MODE
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12/16/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2, 4-5, 7-16, and 28-29, are rejected under 35 U.S.C. 103(a) as being unpatentable over U. S. Patent No. 6,001,515 (Evans et al., hereinafter referred to as Evans) in view of JP 09-318805 (Kondo et al., hereinafter referred to as Kondo).

Evans, in col 5, lines 22-30, and lines 48-67, in col 6, lines 1-4, in col 12, lines 62-67, in col 13, lines 1-10, and in figure 1B, discloses forming a resist pattern on the panel (LCD panel on the substrate i.e., the object layer is divided into plurality of divided areas, see figure 1A) by transferring the resist material (radiation curable ink) from the grooves of the cliché (intaglio roller) onto the transfer layer (blanket), by rotating and contacting the surface of the intaglio roller (cliché). Evans, in col 5, lines 48-67, in col 8, lines 20-24, discloses that the transfer layer (blanket) is applied onto the collector roll (printing roll) prior to transferring the resist in the grooves (resist pattern) to the printing roll, transferring the resist pattern onto the transfer layer (blanket), and then transferring the resist pattern on the transfer layer by rolling the collector roll (printing roll), with the transfer layer and the resist pattern on the transfer layer, onto the glass substrate (etching object layer). Evans, in col 9, lines 12-17, discloses that the transfer layer improves the adhesive force with the resist (remains sticky or tacky to contact and

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remove the pattern from the intaglio roller) (claims 1, 11-12, and 28-29). Evans, in col 9, lines 12-65, in col 12, lines 62-67, in col 13, lines 1-5, and in figures 4, and 5, discloses that the circumference and shape and height and size of the blanket (transfer layer) is the same as that of the collector roll's (cylindrical shape, see figures 2-5), and that the area of the blanket (transfer layer) is less than that of the etching object layer (glass substrate), and the area of the substrate is a whole multiple of the area of the blanket (claims 2, 4-5, 7, and 13). Evans, in col 3, lines 20-21, and lines 47-53, and in col 6, lines 6-9, discloses that the etching object layer can be a glass substrate (i.e., SiO_x) and/or that the etching object layer can be a TFT (i.e., TFT includes at least a metal layer), and/or that the etching object layer can include an ITO layer (i.e., semiconductor layer) (claims 8-10, and 14-16).

The difference between the claims and Evans is that Evans does not disclose that the cliché is divided into a plurality of areas (first and second portions) corresponding to the divided areas (first and second areas) of the substrate.

Kondo, in the abstract, and in paragraph nos. [0001], [0019], [0020], [0022], and in figure 2, discloses that the intaglio (cliché) is divided into a plurality of areas (LCD pattern) corresponding to that of the divided areas of the substrate (the substrate can be a LCD color filter); i.e., the LCD pattern of the cliché (intaglio) has grooves and the claimed plurality of areas i.e., first area and second area (or first and second portions), and the substrate is also an LCD filter i.e., the grooves and the areas (first and second etc) correspond to that of the intaglio (cliché); and thus the resist in the grooves of the first area of the cliché (intaglio) is applied via the printing roll onto the corresponding first

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area of the LCD substrate, and the resist in the grooves of the second area of the cliché (intaglio) is applied via the printing roll onto the corresponding second area of the LCD substrate

Therefore, it would be obvious to a skilled artisan to modify Evans by employing an intaglio (cliché) as suggested by Kondo because Kondo, in [0018], and [0019], discloses that using the cliché (intaglio) that has a pattern that is the same as that of the substrate (LCD) enables the reproduction of the detailed pattern with a high degree of accuracy.

Response to Arguments

3. Applicant's arguments filed August 13, 2008, have been fully considered but they are not persuasive. The 103 rejection made in the previous office action (paper no. 20080401) is maintained.

A) Applicants argue that none of the references teaches the recitation, see below, transferring the resist in the grooves of the second portion of the cliché on a blanket applied on a surface of the printing roll by contacting and rotating the printing roll with the second portion of the cliché, the printing roll corresponding to the second portion of the cliché;

applying the resist transferred on the surface of the blanket of the printing roll on the etching object layer on the second area of the substrate.

Evans teaches the transfer the of the resist in the grooves to the etching object layer via the blanket applied on the printing roll, wherein the area of the resist in the grooves and the area of resist transferred to the etching object layer correspond to each other.

However, Kondo is relied upon to disclose that the intaglio (the claimed cliché) is an LCD, wherein the LCD has plurality of grooves and has plurality of areas viz., first area,

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second area, and Kondo, also discloses that the substrate to which the resist is transferred to is also a LCD filter, and the LCD filter corresponds to that of the intaglio i.e., the resist from the grooves in the first area or first portion of cliché is transferred to the corresponding first area of the LCD filter (etching object layer) via the printing roll, and similarly, the resist from the second area or second portion of the intaglio is transferred to the corresponding second area of the LCD filter (etching object layer). Therefore the combination of Evans in view of Kondo teaches the claimed limitation.

Conclusion

4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daborah Chacko-Davis whose telephone number is (571) 272-1380. The examiner can normally be reached on M-F 9:30 - 6:00. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, Mark F Huff can be reached on (571) 272-1385. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Daborah Chacko-Davis/
Examiner, Art Unit 1795

December 8, 2008.